DISTRIBUTED DESIGN SERIES
CEILING LOUDSPEAKERS

BRACKETS AND ACCESSORIES GUIDE

Accessory Part No	Description
D45-CATR	Can Adapter / Trim Ring for D4LP, D4 and D5
D6-CATR	Can Adapter / Trim Ring for D6
D45-FAR	Face Adapter Ring for D4-FO and D5-FO Face-Only Units
D6-FAR	Face Adapter Ring for D6-FO Face-Only Unit
D45-NCB	New Construction Bracket for D4LP, D4 and D5
D6-NCB	New Construction Bracket for D6
D8-NCB	New Construction Bracket for D8
D10-NCB	New Construction Bracket for D10 and D10SUB

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ABOUT WIRING

Wiring of the loudspeakers is not discussed in this accessory guide. For information on wiring, please see the complete *Distributed Design Series Ceiling Loudspeaker Installation and Operation Manual* at www.communitypro.com. The installer must route the wires and connect them properly before the loudspeaker installation is completed.

NOTICE: Every effort has been made to ensure that the information contained in this guide was complete and accurate at the time of printing. However, due to ongoing technical advances, changes or modifications may have occurred that are not covered in this manual. The latest version of this manual and the most recent product information published by Community is always available at **http://www.communitypro.com.**

CAUTION

Installation of loudspeakers should only be performed by trained and qualified personnel. It is strongly recommended that a licensed and certified professional structural engineer approve the mounting design.

WAIVER OF LIABILITY

Whenever Community Light and Sound, Inc. (CLS), dba Community Professional Loudspeakers is requested to provide advice or material regarding the design or installation of its equipment such advice or material is intended and provided for information purposes only. The advice or material is only intended to familiarize the user with various options for design, coverage and installation. User expressly agrees that CLS shall not be liable for any damages, whether in tort, contract, strict liability or otherwise consequential, incidental or otherwise to person or property as a result, directly or indirectly, of the use of any advice or material. The user of any advice or material provided by CLS assumes all risk and liability for the use thereof. Without limitation to the above, CLS does not accept liability or responsibility for the performance of any manufacturer, design, method, use, material or technique employed by the acoustic designer and/or installation company. All advice, information or material is subject to field variations and environmental conditions. All advice, information, or material given is offered on the assumption that common or standard practices for installation used in the construction trades is applied to all phases of the user's project. Actual assembly or configuration must be performed only by persons with knowledge of mechanical trades and rigging, where applicable. Any installation method must be certified by a Professional Engineer licensed in the state in which assembly or configuration is located.

CAN ADAPTER / TRIM RING (CATR)

The Distributed Design Series (DDS) Can Adapter/Trim Ring (CATR) is intended for use when a D-Series ceiling loudspeaker is being mounted in either an existing oversize hole in the ceiling or when the **entire** D-Series ceiling loudspeaker can assembly is being mounted inside of an existing, larger, industry standard-type back can.

Using the CATR with an Existing Oversize Hole

If the DDS ceiling loudspeaker is being fitted into an existing oversize hole of up to 11 inches (279 mm) in diameter or if the DDS loudspeaker is being inserted into a previously installed larger industry back can, then you can use a CATR to dress the installation. By using two CATR's per loudspeaker you can also add rigidity where it is necessary.

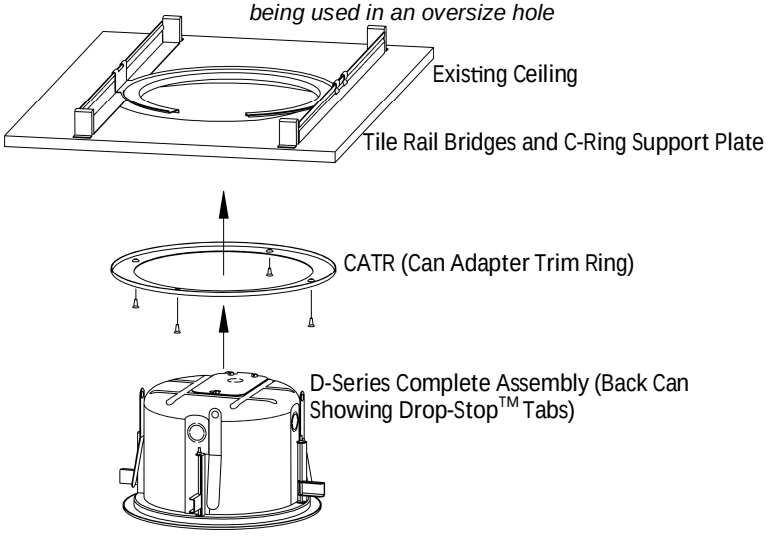
There are two models of the Can Adapter/Trim Ring. The D45-CATR is used for retrofit installations of an entire D4LP, D4 or D5 complete assembly into an existing larger industry back can or into an existing but oversize ceiling hole. The D6-CATR does the same for a D6 complete assembly.

NOTE: Before mounting a loudspeaker into an oversize hole using the CATR, insert the provided rubber hole plugs into the four countersunk holes on the CATR that will face outward. Insert the plugs, pull them through from the rear side firmly and cut the excess length off of the plugs from the rear side so that they do not interfere with installation. You will not need to use the provided 8-32 screws in this application and you should not need to use the provided clamp extenders.

When using a CATR to mount a D-Series loudspeaker into an oversize hole, it is recommended that the user also use the standard tile rails and C-ring behind the ceiling whenever possible for the best possible weight distribution and support. Rotate the back can as necessary to ensure all of the clamps are oriented to contact and compress the C-Ring to the ceiling tile.

Figure 1:

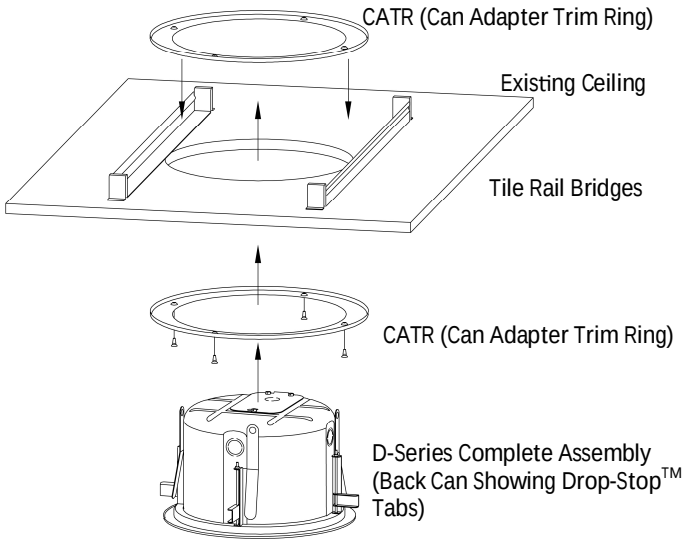
Suggested use of CATR and Standard C-Ring being used in an oversize hole


Existing Ceiling
Tile Rail Bridges and C-Ring Support Plate
CATR (Can Adapter Trim Ring)
D-Series Complete Assembly (Back Can Showing Drop-Stop™ Tabs)

The next illustration depicts use of the CATR to mount the DDS ceiling loudspeaker assembly into an existing, significantly oversize hole (up to 11 inches or 279mm in diameter). In this case, two CATR's are deployed, one atop the ceiling and one below it. When it is not practical or possible to use the D-Series C-Ring and tile rails for support, a second CATR may be deployed on the rear of the ceiling to provide a clamping surface for the loudspeaker. If there is access into the ceiling (for example, by lifting up an adjacent ceiling tile), the second CATR may be used without modification.

Figure 2:

Dual CATR's used to strengthen and bridge the gap across an existing oversize ceiling hole


CATR (Can Adapter Trim Ring)
Existing Ceiling
Tile Rail Bridges
CATR (Can Adapter Trim Ring)
D-Series Complete Assembly (Back Can Showing Drop-Stop™ Tabs)

The uppermost CATR rests, lip up, atop the Tile Support Bridge Rails that come with the DDS Loudspeaker assembly; the C-Ring Support Plate is not used since it is not large enough to cover the oversize hole. The Tile Support Bridge Rails provide extra stability. The CATR on the bottom serves to trim the hole and it provides a necessary surface for clamping by the flange of the loudspeaker's back can.

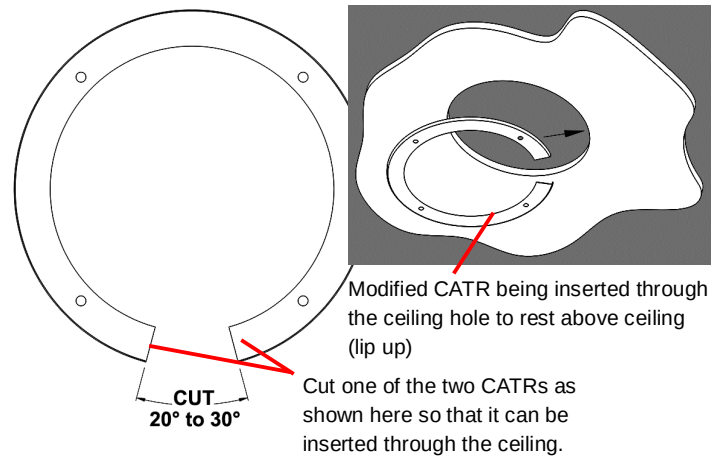
When there is no access to the upper surface of the ceiling, the factory-supplied CATR must be modified to provide a method for getting the bracket through the smaller diameter hole in the ceiling. The solution is to cut a small 20 to 30 degree arc from the CATR as shown in Figure 3; the larger arc is needed for thicker ceiling. Tilt the modified CATR, slip its cutout over the ceiling, and rotate the CATR to position it appropriately, as illustrated. Make sure that the CATR is properly centered above the existing hole to provide the best support possible.

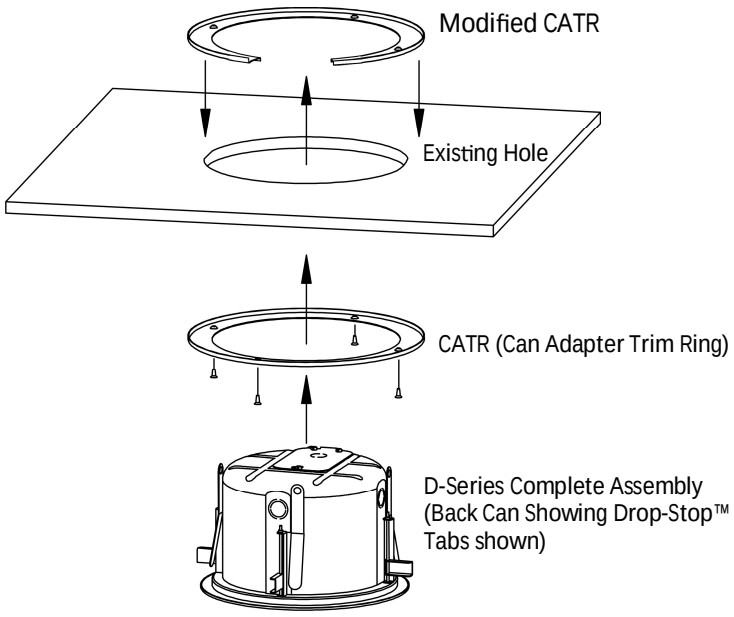
CAN ADAPTER / TRIM RING (CATR) CONTINUED

NOTE: It is not recommended to use this method of loudspeaker mounting on thin ceilings or those that may sag over time. Use the C-ring and Tile Support Bridge Rails whenever possible to help support the load of the loudspeaker. It is up to the installer to determine if this method of loudspeaker mounting is appropriate. Improper use of this method can lead to injury or even death if a poorly supported loudspeaker falls from the ceiling.

Figure 3:

Modification of one CATR in an oversize ceiling hole when there is no access other than through the hole itself


Modified CATR being inserted through the ceiling hole to rest above ceiling (lip up)
CUT
20° to 30°
Cut one of the two CATRs as shown here so that it can be inserted through the ceiling.


Modified CATR
Existing Hole
CATR (Can Adapter Trim Ring)
D-Series Complete Assembly (Back Can Showing Drop-Stop™ Tabs shown)

When you then install the complete D-Series loudspeaker assembly (D4, D4LP, D5 or D6) be sure that all the Drop-Stop Tabs of the loudspeaker back can will rest on the CATR (i.e., don't align it so that a tab is above the cut-out arc. Obviously there is no need to cut an arc in the CATR that sits below the ceiling (lip down), nor would you want to do so for cosmetic reasons. This concludes the "Trim" function of the CATR.

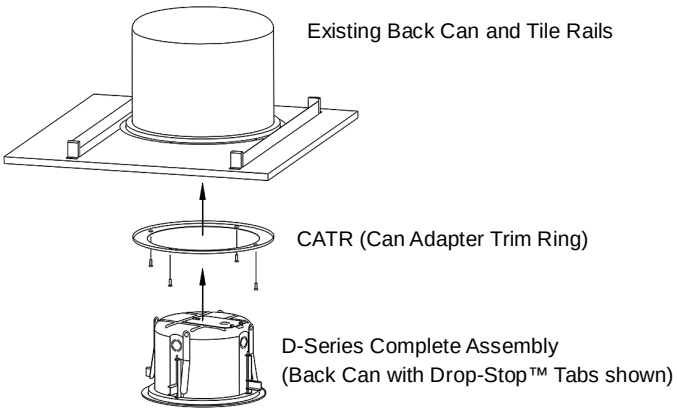
Using the CATR with an Existing Industry Back Can

You can use a CATR to install a D4, D4LP, D5 or D6 complete loudspeaker assembly, including the back can, into an existing larger back can. This is the "Adapter" function of the CATR. Leave the existing back can and its tile rails (if any) in place. Using the four (4) supplied 8-32 screws, mount the CATR into the existing back can using the existing screw inserts on the can, taking care to center the CATR (Note: you will not need to use the hole plugs in this application).

Before installing the D-Series loudspeaker into the existing back can you must install the provided Clamping Extenders onto the ceiling loudspeaker clamping feet. Simply slide the plastic clamp extenders over the metal clamp. For the best performance align the outer edge of the extender with the outer edge of the existing clamp. Make sure to fold the clamps back against the can before proceeding to install the loudspeaker. Once that is completed, you can open the Drop-Stop Tabs slightly, insert the DDS loudspeaker back can through the CATR, listening for the Drop-Stop Tabs to snap into position. Then turn the Phillips-head Can-Locking Clamp Actuator screws in the DDS can so that it is secured in place, following the same procedure recommended in the *Distributed Design Series Ceiling Installation and Operation Manual* for standard ceiling loudspeaker installation.

Figure 4:

D45-CATR used to fit an entire assembled D4, D4LP or D5 into a larger existing back can


Existing Back Can and Tile Rails
CATR (Can Adapter Trim Ring)
D-Series Complete Assembly
(Back Can with Drop-Stop™ Tabs shown)

Parts Supplied with Can Adapter / Trim Ring (CATR)

D45-CATR
(3) Clamp Extender
(4) Trim Ring Screw Hole Plug
(4) 8-32x1 Oval Head Screw, White
(1) 4.5/5" Can Adapter / Trim Ring

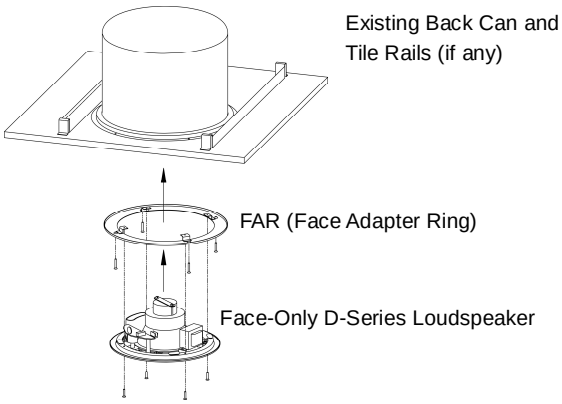
D6-CATR
(4) Clamp Extender
(4) Trim Ring Screw Hole Plug
(4) 8-32x1 Oval Head Screw, White
(1) 6" Can Adapter / Trim Ring

FACE ADAPTER RING (FAR)

The Face Adapter Ring allows a “Face-Only” DDS ceiling loudspeaker assembly (D4-FO, D5-FO or D6-FO) to be mounted into an existing industry back can for retrofit installation. The illustration below shows where the FAR should be located when implementing this mounting method.

Figure 5:

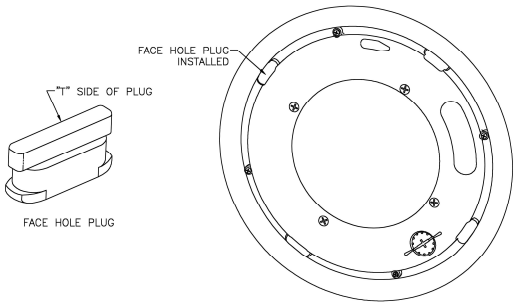
Using the FAR to mount DDS loudspeaker faces (face-only units) into existing industry back cans for retrofit installations



Installation of the FAR to the back can is identical to mounting a CATR to the back can (see the CATR section on pages 3-4). Before mounting the face-only FO model ceiling loudspeaker face onto the FAR, the supplied Face Hole Plugs must be installed onto the faces to prevent air leaks. Failure to install the Face Hole Plugs may compromise the performance of the loudspeaker. By design, the Face Hole Plugs fit very tightly and may be somewhat difficult to get into place. From the front of the face, push the “T” side of the Plug through one of the oval holes on the loudspeaker face. Using pliers, finish pulling the hole plug through the face until the underside of the flat “flange” of the plug is resting flush on the loudspeaker face and is fully within the groove on the face. If interference occurs between the loudspeaker face and the plug flange, it is okay to trim off the long sides of the flange to reduce the interference.

Figure 6:

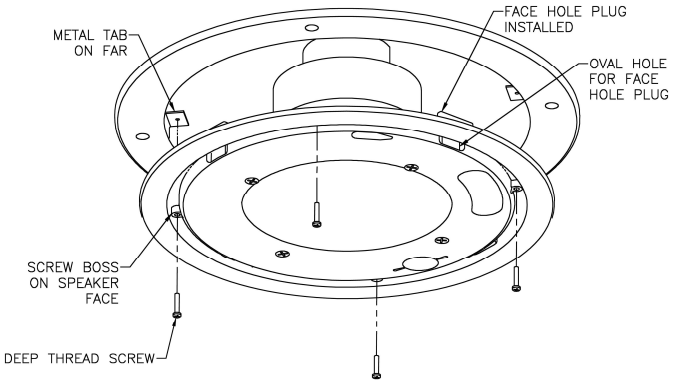
Before mounting the DDS loudspeaker face into the existing industry back can, the Face Hole Plugs MUST be installed on the face to prevent air leaks.



Once the Hole Plugs are inserted you may mount the face to the FAR. Carefully align the four (4) reinforced screw bosses on the loudspeaker face with the four (4) metal tabs sticking out on the FAR. Using the four (4) provided deep thread screws, screw through the four bosses on the face and into the metal tabs. Doing this by hand may be difficult. We recommend that you use a powered screwdriver with a reasonable amount of torque to help get the screws started into the metal. Once the screws are started, they will finish going in easily. Make sure that the outer edge of the plastic loudspeaker face is seated flush against the FAR all the way around the loudspeaker after installation is complete.

Figure 7:

When mounting the DDS loudspeaker face to the FAR, carefully align the screw bosses with the FAR's metal tabs



Parts Supplied with Face-Only Adapter Ring (FAR)

D45-FAR
(3) Face Hole Plug
(4) Trim Ring Screw Hole Plug
(4) 8-32x1 Oval Head Screw, White
(1) 4.5/5” Face Adapter Ring

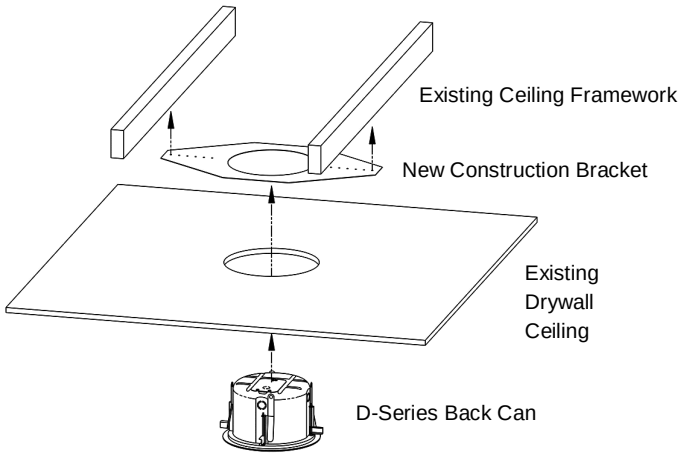
D6-FAR
(4) Face Hole Plug
(4) Trim Ring Screw Plug
(4) 8-32x1 Oval Head Screw, White
(1) 6.5" Face Adapter Ring

NEW CONSTRUCTION BRACKET (NCB)

Community offers four sizes of New Construction Brackets (NCB) suitable for 4.5-inch, 5-inch, 6.5-inch, 8-inch and 10- inch diameter DDS ceiling loudspeakers. The illustration below is simply an introduction to the NCB. Please see Community's *Distributed Design Series Ceiling Loudspeaker Installation and Operation Manual* for information on drywall ceiling installation methods, pre-installation in a new drywall ceiling, and inserting the loudspeaker assembly into the back can.

Figure 8:

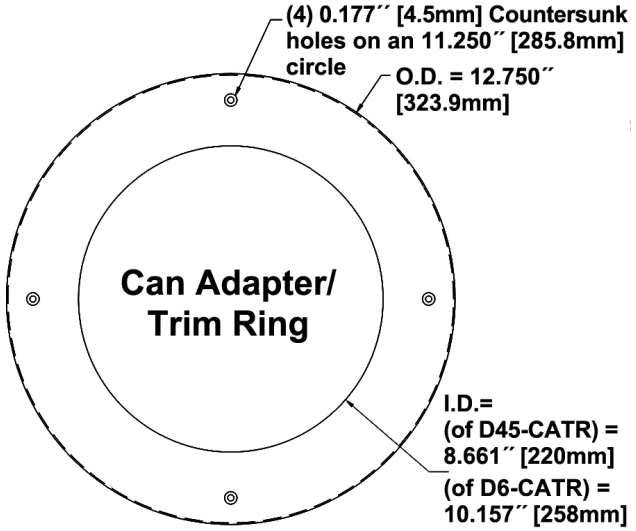
Using a New Construction Bracket (NCB) to mount a complete D4LP, D4, D5, D6, D8, D10 or D10SUB Ceiling Loudspeaker Assembly in a new drywall ceiling structure



ACCESSORY DIMENSIONAL DRAWINGS

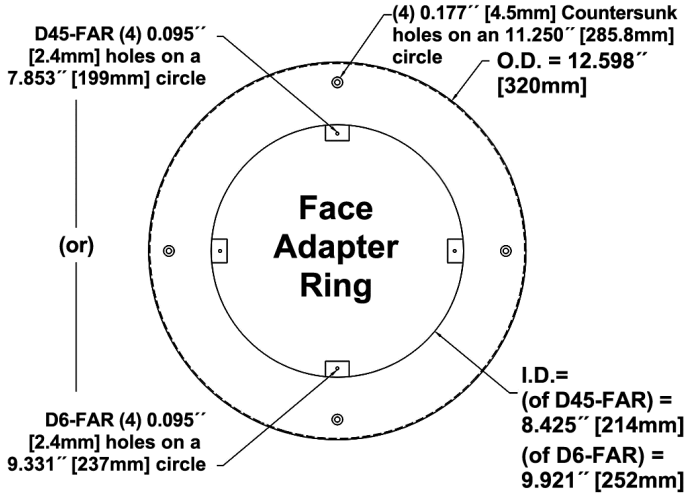
The illustrations on this page are NOT drawn to scale. They do accurately depict the dimensions of the various mounting adapters discussed in this document. Please also see Community's *Distributed Design Series Ceiling Loudspeaker Installation and Operation Manual* for a chart depicting the use of these items with various Distributed Design Series ceiling loudspeaker systems.

Can Adapter / Trim Ring

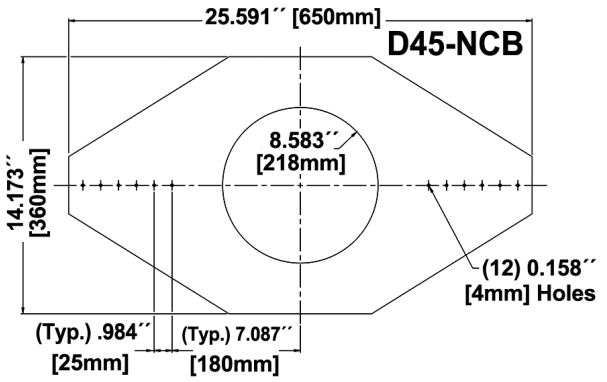

(4) 0.177″ [4.5mm] Countersunk holes on an 11.250″ [285.8mm] circle
O.D. = 12.750″ [323.9mm]
Can Adapter/ Trim Ring
I.D.= (of D45-CATR) = 8.661″ [220mm]
(of D6-CATR) = 10.157″ [258mm]

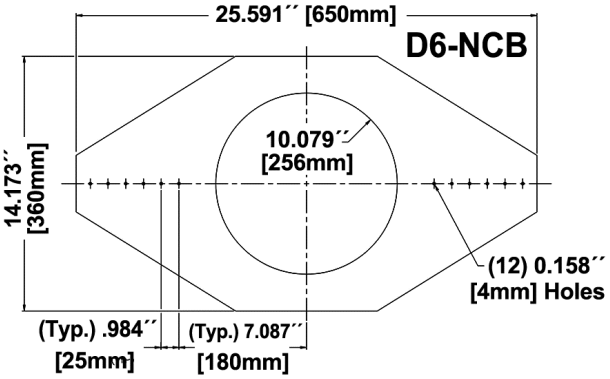
NOTE: D45-CATR and D6-CATR have the same OD

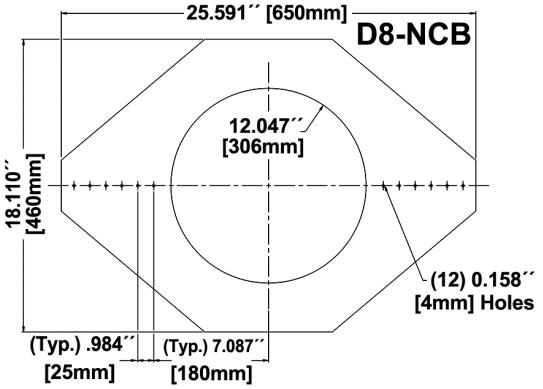
Face Adapter Ring

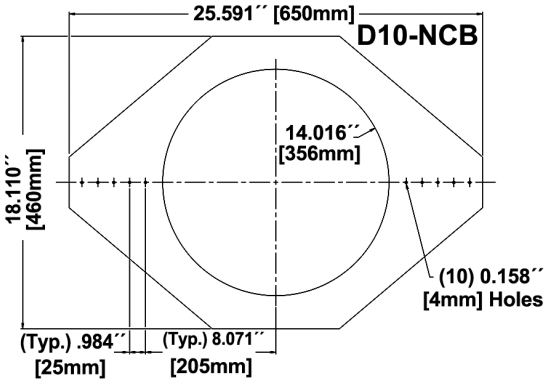

D45-FAR (4) 0.095″ [2.4mm] holes on a 7.853″ [199mm] circle
(4) 0.177″ [4.5mm] Countersunk holes on an 11.250″ [285.8mm] circle
O.D. = 12.598″ [320mm]
(or)
Face Adapter Ring
I.D.= (of D45-FAR) = 8.425″ [214mm]
(of D6-FAR) = 9.921″ [252mm]
D6-FAR (4) 0.095″ [2.4mm] holes on a 9.331″ [237mm] circle

New Construction Brackets









COMPATIBLE INDUSTRY BACK CANS

The following industry back cans are compatible with Community Distributed Design Series Can Adapter / Trim Rings (CATR) and Face Adapter Rings (FAR). "√" indicates that the manufacturer back can is compatible.

Back Can Manufacturer		D4LP		D4 / D5		D6	
Model		D45-FAR	D45-CATR	D45-FAR	D45-CATR	D6-FAR	D6-CATR
Atlas	**95-8** (All Versions)	√	√				
	95-8-7 (All Versions)	√	√	√	√		
	95-8-10 (All Versions)	√	√	√	√		
	96-8 (All Versions)	√	√				
	96-8-7	√	√	√	√	√	√
	96-8-10	√	√	√	√	√	√
	Q408	√	√	√	√	√	√
Lowell	**CP84**	√	√				
	CP87	√	√	√	√	√	√
	CP810	√	√	√	√	√	√
	DX58	√	√	√	√		
	DX108	√	√	√	√	√	√
	RF841	√	√				
	RF871	√	√				

NOTE: On some "Torsion" model enclosures, the internal torsion hardware may need to be removed prior to installing the FAR or CATR. Torsion models are sometimes known as "Spring" models and often have a "T" prefix in the model number, such as the Atlas T95-8.

The following industry back cans are NOT compatible with Community Distributed Design Series ceiling loudspeaker products and accessories.

Atlas Back Cans: Any 95-4 Series, any 96-4 Series, any 96-6 Series, 95-12, EZ195-8, CS95-8 and any E410 Series

Lowell Back Cans: XCP84, XCP87, XCP810, IX610, IX810, CP4, 8X and DX104.

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